Johnson (Jos. 7.)

### ON THE TREATMENT

OF

# PLACENTA PRÆVIA.

BY

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## PLACENTA PRÆVIA.

Dr. Johnson, after remarking upon the importance of prompt diagnosis and skilfull treatment, presented the views of former writers and teachers of midwifery, giving the statistics of the results obtained, with the treatment which they recommended and practiced.

In a paper read by Greenhalgh, before the Obstetrical Society of London, 1864, the following statement is made: "From large and impartially collected statistics of cases of placenta prævia, one mother out of every four and one-quarter is lost, and two-thirds of all the children are still-born."

The fœtal mortality was so great in the modes of treatment generally practiced previous to 1864, that Sir James Simpson and Churchill expressed the opinion "that the hope of saving the child ought scarcely to influence the treatment," and, with their followers, so managed these cases as to practically disregard its safety.

Dr. Johnson stated it as his belief that by selecting a time for the induction of premature labor, in cases clearly diagnosed, and before the vital powers of the patient had become exhausted by copious or repeated hemorrhages, that the lives of many women and children could be saved, which, as we see by Greenhalgh's figures, were lost under the form of treatment so universally in vogue previous to the date of his paper.

The two following histories of cases selected from the doctor's consultation practice illustrate the treatment which has heretofore been the routine practice, and which still has the indorsement of many text-books:

Case I—Was called in consultation on the evening of January 23, 1877, to see a case of placenta prævia with Dr. M. The lady was 36 years of age and the mother of four children. She had been the subject of exhausting hemorrhage in each confinement. During the last two months of this pregnancy the doctor had treated her for three

severe attacks of flooding, which he had been able to control, and she was now in actual labor at her natural term. Treatment which had formerly succeeded now failed. She had previously been relieved by using tinct. opii, acetas plumbi, galic acid, cold drinks, and cold applications freely used about the vulva, thighs and abdomen, and quiet in bed. In this attack gushes of hemorrhage occurred on the evening of the 22d. They increased in quantity and frequency, and labor pains setting in, the doctor was called about daylight of the 23d. So alarming was the flooding at one time during the day, that the doctor expressed his fears to the family that she might not survive. She, however, rallied under the use of brandy, ammonia, and beef-tea. When I saw the patient, twenty-six hours after the commencement of labor, she was much prostrated and had a pulse of 145 to the minute. Her pains had almost entirely died out, accomplishing actually nothing but the discomfort of the sufferer. The vagina was securely tamponed with sponges medicated with matico, and no hemorrhage had taken place for several hours. After administering another potation of brandy and beef-tea, at the doctor's request, I removed the tampon and easily diagnosed a partial placental attachment over the os uteri and a vertex presentation.

By the use of Barnes' dilators the cervix was, at the end of an hour, sufficiently dilated to easily admit the hand, and podalic version was performed without difficulty. The child was still-born. The mother had felt no signs of life, and the fœtal heart was not heard for twelve hours previous to delivery. Soon after the introduction of the dilator contractions came on and were encouraged by the use of ergot, pressure and friction. As the child was extracted Doctor M. followed the uterus down with his hand, securing at the same time expression of the placenta and firm uterine contraction. The vulva was washed with cold water and dry napkins placed against it. The interior of the uterus had been mopped over with a solution of matico, and so firm contraction secured by it and constant pressure that no further hemorrhage occurred. The lady rallied for a while, but subsequently sank and died, in the full possession of her faculties, seven hours after the delivery of the child.

Case II—Was called in great haste from the Medical College on the 10th of October, 1877, to see a lady in labor, and flooding to an alarming degree. I found the patient was under the care of a female homeopathic physician. The urgency of the symptoms were such that I could not decline to render any service which I might to avert what seemed to be speedily approaching death. The history of this

case was similar to the one just detailed. The lady was the mother of four children. She had had several attacks of flooding, and a diagnosis of placenta prævia had been plainly made six or eight weeks before labor came on. Hemorrhage had subsided each time under quiet, rest in bed, cold drinks and cold applications and some kind of infinitesimal dosing, I don't know what. I found that in this attack the lady had lost much blood, and the labor pains, which had at first been powerful, had nearly died out. Her vital fluid was constantly oozing away. Her pulse was 148; she was excited and anxious. Her prostration was so great that it did not seem wise to make any change in her position in bed. The patient, family, friends and the attending physician all urged speedy delivery, and as an empty and firmly contracted uterus seemed to present the only hope of controlling the hemorrhage and saving her life, I passed my hand through a very dilatable cervix, turned and slowly delivered a still-born child. The placenta came away soon after. The uterus was made to contract firmly, and no subsequent loss of blood took place; an hour after her delivery the patient had a fair pulse, and only 98 to the minute. My connection with this case ended with the grateful acknowledgements of the husband as I left the house. The attending physician then resumed charge of the patient. She called and informed me two weeks later that Mrs. C. died on the ninth day after delivery. She never fully recovered from the loss of blood which she had sustained, though, until the fifth day she gave fair promise of recovery. When left alone on the fifth day she got out of bed and walked barefooted into the next room, where she was found by some of the family, having fainted. After this she had chills, high temperature, and great prostration, and grew worse until the ninth day, when she died. She had no abdominal pain or hemorrhage after delivery.

These two women and their unborn children perished from the effects of hemorrhage. This hemorrhage was not controlled by the treatment usually practiced. Although the attacks occurring previous to confinement were arrested, no human wisdom or foresight could calculate at what hour other and perhaps fatal attacks might come on. They were certainly liable to occur at a time and under circumstances precluding the possibility of securing skillful medical aid in time to prevent death. Their greatest safety, therefore, was in eliminating the element of danger, and by the induction of premature artificial delivery, securing an empty and firmly contracted uterus. The risk to the child, as well as to the mother, is less by

this mode of treatment than to allow the case to progress, be the patient watched ever so vigilantly.

Had a time been selected after the first hemorrhage, when the diagnosis was clearly made out, and premature labor brought on, these viable children and their mothers, in the cases just referred to, would have had a much better chance of living than by temporizing with the treatment used. The prospect for the child, which is usually so poor when born prematurely, is really better when safely out of the uterus, than in it, with this sword of Damocles suspended over its innocent head by such a brittle thread. Thomas says upon this subject: "I cannot resist the conviction, that when premature delivery becomes the universal practice for placenta prævia the statistics of the present day will be replaced by others of a far more satisfactory kind."

Barnes, in 1864, gave a total of 83 cases of placenta prævia treated by the induction of premature labor. The deaths were only 6, or 1 in 14. Greenhalgh had seen 10 cases without a single maternal death, and only two of the children were lost. Barnes reported 63 cases in succession with only one feetal death; and Hall Davis had induced premature labor in 24 placenta prævia cases with only two deaths. Thomas reports 11 cases with only two deaths. Grailey Hewitt refers to cases lost under the temporizing method, which, he believes, could have been saved by the timely induction of labor, and in a speech in the Obstetrical Society, of London, in 1864, urged that body "to express its emphatic opinion on this subject for the purpose of giving authority to this operation, so that patients known to have placenta prævia would not be left by practitioners to perish at any moment from hemorrhage." This point was illustrated by the following case from Meigs, given in the language of that author: "I may say that we had here in Philadelphia three physicians, the celebrated Prof. Dewees, Dr. Eberle, and Dr. John Ruan, each of whom had a considerable share of the obstetric practice of the city. Dr. Eberle had under his care a lady in Market street, whose residence was about two and a half squares from his own house. Dr. Ruan lived about a square, and Dr. Dewees was distant three squares. After Dr. Eberle had made the diagnosis of placenta prævia, the flooding having been suspended, he engaged the husband of the lady to send off three messengers as soon as the attack should come on again, one for Dr. Ruan, who was nearest, one for himself, and one for Dr. Dewees, hoping in this way to secure the prompt attention of at least one of the three. Not long after this,

hemorrhage came on again, and was so violent as to prove fatal before they could assemble at her bedside."

Had these very able physicians employed their skill to *empty* that lady's uterus, after they became aware of the existence of placenta prævia, instead of *waiting*, they would probably not have been called upon to lament the untimely death of herself and child.

Greenhalgh shows that only one maternal death occurs in fiftythree cases where premature labor is induced, and that only one-third of the children are lost.

Dr. Johnson also cites corroborative evidence from Playfair, Leishman, Hicks, Eliott, and Parvin in support of inducing premature delivery in similar cases.

Meadows is also very emphatic. He says: "No matter what the period of utero-gestation, any large loss of blood demands the termination of pregnancy, for, to leave a patient to be subjected to another attack, coming on, as it would do, without any warning, is, in truth, to place her life in imminent danger. The only justifiable ground for a temporizing policy is a slight discharge, absence of pain, an undilated os, and a period of pregnancy short of six months."

Barnes, the highest living authority in obstetric practice, as Dr. Albert Smith, of Philadelphia, declares, makes use of the following language: "The first question, we have seen, is to decide whether the pregnancy can be allowed to go on. If the pregnancy is only five or six months, the os not dilated, all pain absent, and the hemorrhage very moderate, we may temporize, watching, however, most vigilantly. But if the hemorrhage be at all profuse, and there be any sign of uterine action, act at once; accelerate the labor. Above all, do not trust to the weak conventional means of keeping the patient in the recumbent position, in a cool room, with cold cloths to the vulva, mineral acids, and acetate of lead. This is but trifling in the presence of a great emergency. Commonly they do no good whatever; they always lose precious time. The great hæmostatic agent is contraction of the uterine fibre. To obtain this contraction is, therefore, the end to be sought."

Playfair and Leishman refer to the use of astringents in every possible form and confess that they are not even in the slightest degree to be depended upon.

Dr. Johnson summed up his remarks upon prophylaxis as follows: "I have now, Mr. President, drawn the attention of the society to the dangers of delay in temporizing in these very hazardous cases.

We have seen that up to 1864, according to Greenhalgh, one mother out of every four and a quarter was lost, and more than two-thirds of the children were stillborn; from past experiences eminent obstetricians have regarded the loss of the fœtus as so probable that they have advocated and practiced treatment in which its welfare was totally disregarded; that when hemorrhage has once occurred we cannot tell at what hour we may have a copious and perhaps fatal return of the flooding; that it is liable to occur suddenly and at a time when medical aid cannot be speedily procured."

In the practice of former methods of treatment we are constantly in doubt and tormented with anxiety. With the most vigilant watchfulness and the engagement of the most skillful accoucheurs, cases are liable to terminate fatally before their arrival at the bedside, as in the case from Meigs, detailed above, or to have sustained a loss of so much blood as finally to cause death through exhaustion or anæmia, as in the cases reported by myself. Instances of either kind will be remembered by all busy practitioners. While, by the timely and skillful induction of premature labor, we have seen that Greenhalgh saved all the mothers and eight of the children in ten cases occurring in his practice. Barnes had eighty-three cases with only six deaths, and sixty-seven cases successively without a single death, and two-thirds of the children were born alive. Hall Davis induced premature labor for this condition twenty-four times with only two deaths."

"Hemorrhage is the one great source of danger, and is fatal alike to mother and child. Women die, of course, from laceration of the vascular cervix, absorption of sceptic material, and are predisposed to puerpural diseases, but this is the chief factor. With the uterus empty and firmly contracted this factor is eliminated, our anxiety is allayed, and the safety of the patient comparatively assured."

"Objection is urged against the premature induction of labor on account of the danger to the child and the difficulty of keeping it warm and nourished after its safe delivery. Upon this point I agree with Thomas that an eight-months' child out of the uterus, and depending upon pulmonary respiration, has a decidedly better prospect for life than one in that cavity, and depending for the æration of its blood upon a crippled and bleeding placenta."

We pass now to those cases in which labor is actually in progress, and to the best means of conducting the patient safely through this dangerous ordeal. I think all will agree that turning has long been considered the remedy par excellence in placenta prævia. That this

is not the best remedy in all cases, and that when it is really indicated it should be performed in a somewhat modified form, and with more gentleness and care in the dilatation of the cervix than has heretofore been taught and practiced, will be established, without doubt, by a study of the mortality statistics of cases treated by the vaginal tampon and rapid version. Rapid extraction was practiced for the purpose of evacuating the contents of the uterus as soon as possible, and thus securing firm contraction of the uterine fibre and suppression of the hemorrhage. If the bleeding can be controlled by a less severe means, and this chief element of peril eliminated from the case, the labor may be allowed to proceed without further interference or assistance. This hasty but time-honored method is referred to in our books as the "rapid treatment," forcible entrance into the os," "rapid dilatation of the cervix," "forcible delivery," "accouchment force," "pushing the hand rapidly through the os," &c. Several authors speak of the "absolute necessity of delivering at once at all hazards," under the belief that so long as the labor continued the hemorrhage would go on, even increasing; the logical conclusion being that it was necessary for the salvation of the patient to empty the uterus as quickly as possible. Rigby, Leveret, and others declared, in emphatic terms, that "manual extraction of the fætus was absolutely necessary to save the life of the mother," and for many years all subsequent authorities concurred in accepting their doctrines and adopting this practice. Forcible delivery often proves fatal to the mothers, by injury done the cervix, and many of the old writers confess that on examination, after death, they invariably found the os uteri more or less torn. Collins and others relate instances of this kind.

Laceration and flooding are not the only dangers in accouchment forcê. By a little reflection it will become apparent why these dangers arise. Labors complicated by placenta prævia frequently come on—Matthews Duncan believes—as a result of the accidental separation of some portion of the placenta from a uterus which is immature, not ready yet for parturition, and whose cervical tissue has not reached the necessary muscular development to safely undergo this laborious process. Its tissues, instead of being muscular and dilatable, are exceedingly vascular and irritable, and the bruisings and contusions and lacerations which are caused by forceable delivery, no doubt explain the frequent occurrence of phlegmasia dolens, scepticæmia, puerpural fever, cervical ruptures and inflamations.

The practical question to which I desire to direct especial atten-

tion is, if the accouchment force is environed by so many dangers, what treatment can we adopt which will present a better and safer mode of accomplishing delivery and firm uterine contraction. Let us study this point a little. It has frequently been noticed that the rupture of the amniotic sac has been sufficient to eliminate the chief danger in these cases, and the labor, carefully watched throughout the remainder of its course, has required no further aid to prevent hemorrhage.

As the liquor amnii escapes, the uterus is reduced in bulk, is provoked to greater activity, and acts to better advantage. The head, if that is the presenting part, is driven down, and as the cervex dilates, the pressure of the head controls the hemorrhage. Barnes and others maintain that hemorrhage will be spontaneously arrested by the detachment of that part of the placenta which is attached to the dangerous or cervical zone of the uterus. The complete detachment and removal of the placenta, (Simpson,) besides being almost certainly fatal to the child, must require an operation hardly less severe to the woman than version itself.

Sponge or laminaria tents may be used in cases of hemorrhage from an undilated os. While the tent expands it at the same time prevents hemorrhage and dilates the cervix. When the tent has expanded to its fullest extent it is removed or slips away, and the smallest size Barnes dilater may be inserted in its place, which in turn is replaced by a larger, and then a larger one, until sufficient dilatation is produced; while at the same time the cervix is completely plugged or tamponed. This process may require from two to six hours, according to the dilatability of the os. Should dilatation go on well, uterine contractions set in powerfully, as is the fact in a large proportion of cases, the hemorrhage is thus controlled until the presenting part of the fœtus becomes itself the plug, no further treatment may be required, and version will be avoided. But if the pains are inefficient and the hemorrhage goes on, in cases where some part other than the head or breech presents, malpresentations being not infrequent in placenta prævia, turning must, of course, beresorted to. The last edition of Leishman declares that this operation is the one in which the great majority of experienced practitioners still place the greatest confidence.

In view of the dangerous and fatal results which have been reported in consequence of forcing the hand through an undilated vascular cervix, and of rapid delivery through parts which, even when everything is normal, slowly, and gradually expand, it seems

to me that the entry of the hand into the uterus at all should be avoided, if it is possible to do so. The method of bi-polar or bimanual version, so successfully practiced by Braxton Hicks, of London, can here be applied with the most beneficial results. By manipulation with one hand upon the abdomen and with two fingers of the other in the uterus, a foot of the child can be hooked down. Unless the case is urgent, nature can be trusted to effect the expulsion unaided after the leg or half breech has been drawn far enough into the cervix to act as a tampon. If considered advisable, continued gentle traction may, of course, be made, combined with and aided by external pressure over the uterus by elastic abdominal bandage and ergot. The shock of rapid extraction is thereby avoided, and the danger of lacerating the vascular cervix is greatly lessened if not prevented. I desire to add, in conclusion, that I am firmly convinced that in proper cases, and when seen in time, the induction of premature labor will save many lives, both feetal and maternal; and, also, that when the above-mentioned gentle means of dilating and at the same time plugging the cervix, are universally adopted, the fearful mortality in these cases will be greatly reduced.

